REMARKS

Applicant respectfully requests reconsideration of the present application and allowance of the pending claims in view of this response. Claims 1-18 are pending in the present application. Claim 15 has been amended. There are no new claims. Claims 1, 3 and 10 are independent claims.

ALLOWABLE SUBJECT MATTER

Applicant appreciates that claims 1 and 2 are allowed and claims 4-9 and 14-18 are objected to as being dependent upon a rejected base claim that would be allowable if rewritten in independent form including all of the features of the base claim and intervening claims. Applicant notes that these claims are allowable in their own right, and not simply for the reasons set forth in the Office Action. However, it is submitted that claims 3 and 10-13 are also allowable in view of the following remarks.

CLAIM OBJECTIONS

Claim 15 has been amended to overcome the antecedence problem, due to the use of "said threshold" in lines 1-2.

An Embodiment of the Present Invention

An embodiment of the present invention provides for a lens control system that enables an accurate focus position previously obtained using a manual or automatic focus function to be easily reproduced accurately and/or easily using a prestored focus position. During a test photography or filming session, multiple focus positions may be obtained, refined and/or stored in the storage device. Later during the actual photography or filming session the prestored camera settings can be recalled to recreate the operations of the camera

exactly as they were during the test session. An example embodiment includes a lens control system having an auto focus device which drives the focus of a photographing lens for automatic focusing and a manual focus mechanism (fig. 2) which drives the focus of the photographing lens based on a zoom 20 and focus 18 control mechanism operated by the cameraman. The lens control system controls the focus lens, zoom lens, iris diaphragm, and/or the tracking lens. The stored information may be displayed on an LCD or computer (fig. 1, 22 and fig. 4). An alternate embodiment allows the operator to manually control the focus position while displaying whether the focus is at a previously marked position or comes within an acceptable threshold.

The entire system may be run by the control unit 16. The control unit may be connected to four drive units, 14A-D; these four driving units may connect to the focus lens, zoom lens, iris diaphragm, and tracking lens, respectively. The control unit 16 may be connected to the camera main body 12 through two cables 12A and 12B. The first cable may be a video signal output which the control unit passes through display unit 22 and may be used to perform the focus evaluation function (fig. 2). The second cable may provide power to the control unit from the camera main body and pass signals between the camera main body and the control unit. The control unit may also have two other inputs from the focus control mechanism and the 18 and resume control mechanism 20, respectively. These two mechanisms may allow for manual control of the camera.

PRIOR ART REJECTIONS

35 U.S.C. § 102(e) Shore Rejection

Claims 3, 10, 12, and 13 stand rejected under 35 U.S.C. 102(e) as being anticipated by Shore et al. (Patent PG Pub. US 2003/0011692 A1). Applicant respectfully traverses this rejection.

Shore teaches an apparatus or system for sensing the distance to the object being filmed, focus distance of the camera lens, focal length of the camera lens, t-stop for the lens, and other similar lens data and the ability to display this data in real-time for convenient reference by the cameraman. Shore emphasizes that the purpose of the invention is to conveniently and automatically make available and visible all this information to the cameraman (paragraph [0003]). Shore states that the system includes a "microprocessor and memory for data specific to that lens for producing precise signals to a display unit." Shore does not teach that any of the real-time information is stored in memory for later reference or comparison. Therefore, Shore cannot disclose "a display device which displays information indicating how said focus present position and said focus stored position are close to each other," as recited in independent claim 3.

The Examiner states "the display device is shown in figures 20-23 showing how the focus stored position and the present lens position are close to each other." However, none of the Figures 20-24 show anything other than the real-time display, a current lens, and focus information (paragraphs [0004], [0023], [0025]). Paragraph [0027], discusses the difference between arrowhead 312 and bar 314 and shows them to represent the distance the object as measured by the range finder and the actual focal settings, respectively. Paragraph [0027] further discusses elements 316 and 318 as the upper and lower threshold of the depth of field of the current lens. Nowhere in these figures is shown a previously stored focal position as defined in independent claim 3. On the contrary, all displayed information includes digital position values that are *updated numerous times every second* (paragraph [0023]). Therefore, it is impossible for Shore to disclose "a displayed device which displays information indicating how said focus present position and said focus stored position are close to each other" as recited in independent claim 3.

Shore also does not disclose "a focus recording position display device which displays the focus position that has been instructed by the instructed device" as recited in independent claim 10.

It is noted that line 2 of independent claim 10 describes "an *instruction device* which instructs on recording a focus position," while line 6 of independent claim 10 recites "the stored focus positions as obtained by *an auto focus device or a manual focus device*." Based on the Examiner's reading both the "instruction device" and the "auto focus or manual focus device" both read on the range finder. This creates a duality problem as the Examiner is reading one device on two distinct devices. Page 9, line 5 describes a marking switch 58 in figure 3 that instructs on recording of a focus position. When the marking switch 58 is turned on, the CPU acquires the present focus position and causes the display 22, to display the focus position. Note that the instruction device only instructs to record the focus position, whereas an auto focus device or manual focus device can provide the focus position to or move the camera to a certain focus position.

Shore provides a continuous feed of real-time information about the camera focus and position (paragraph 0023). Shore cannot provide (and it would be illogical to say Shore provides) for "an instruction device which would instruct on recording a focus position to be stored" as recited in independent claim 10, because Shore does not store position data for non-real-time purposes.

Accordingly, for the reasons set forth above Shore fails to anticipate or suggest features of independent claim 10. Therefore, applicant also submits that claims 11-13 are allowable at least because they depend on allowed independent claim 10.

Therefore, applicant respectfully requests that the outstanding rejection be withdrawn.

35 U.S.C. § 103(a) Shore/Bauer Rejection

Claims 11 stands rejected under 35 U.S.C. § 103 as being unpatentable over Shore in view of Bauer (U.S. Patent No. 6,148,151). Applicant respectfully traverses this rejection.

The Examiner admits that shore does not teach "wherein the auto focus device drives a focus of a photographing lens for automatic focusing" as recited in applicant's claims 11.

Applicant submits that claim 11 is allowable because it depends on allowed independent claim 10, and Bauer fails to make up for the deficiency discussed above with respect to Shore.

Therefore, applicant respectfully requests that the outstanding rejection be withdrawn.

CONCLUSION

Accordingly, in view of the above amendments and remarks, reconsideration of the objections and rejections and allowance of each of claims 1-18 in connection with the present application is earnestly solicited.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact John A. Castellano at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY, & PIERCE, P.L.C.

By _____

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